**Bell Laboratories**

Subject: **How to Protect Against a Militant Spammer**        date: **April 2, 1999**

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Please consider the patentability of the attached "How to Protect Against a Militant Spammer". The following is a description of the patentable part of the paper.

Several methods exist to prevent against spamming performed by an attacker who buys email addresses or gets such from newsgroups. None exist that also protect against attackers who can eavesdrop on communication lines and/or alter messages sent by others.

We protect against the above mentioned adversary, shift computational costs towards initiators of traffic, and implement additional properties such as authenticity and encryption for no extra cost or for a low extra cost, given the existing architecture to prevent against spam.

I propose design methods to shift costs towards initiator; use known MAC methods in a new way in order to prevent against the spamming attack. The former puts a well-known primitive, the one-time pad, to a novel use; whereas the latter uses MACs to communicate passwords in a way that prevents these from being stolen.

A strong intellectual property position in this regard will be of immense value to Lucent.

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Attachment